

### **DETAILED ACTION**

This application is a 371 of PCT/CN04/00039.

Claims 1-12 and 14-16 are pending. Claims 5-12 are withdrawn. Claims 1-4 and 14-16 are under consideration.

#### ***Response to Arguments***

In view of the Examiner's Amendment set forth below, all of the rejections previously applied are hereby withdrawn.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Simmons on March 31, 2010.

The application has been amended as follows:

#### **IN THE CLAIMS:**

Replace claims 1-4 and 14-16 with the following claims.

--1. (Currently Amended) A variant of the Moloney murine leukemia virus reverse transcriptase of SEQ ID NO:2, wherein said variant has the amino acid sequence of SEQ ID NO:2 except having the amino acid X at position 84, which is an

amino acid with a side chain shorter than that of glutamine, and said variant has reverse transcriptase activity.--

--2. (Currently Amended) The variant of claim 1, except having the amino acid asparagine at position 524 replaced with the amino acid aspartic acid.--

--3. (Currently Amended) The variant of claim 1, wherein the amino acid X is alanine, serine, aspartic acid or asparagine.--

--4. (Currently Amended) The variant of claim 3, wherein the amino acid X is alanine.--

--14. (Currently Amended) The variant of claim 2, wherein the amino acid X is alanine, serine, aspartic acid, or asparagine.--

--15. (Currently Amended) The variant of claim 14, wherein the amino acid is alanine.--

--16. (Currently Amended) A variant of the wild type Moloney murine leukemia virus reverse transcriptase having the amino acid sequence of SEQ ID NO:9, wherein said variant has the amino acid sequence of SEQ ID NO:9 except having the amino acid mutation at position 84, such that the glutamine is replaced with amino acid X,

wherein said amino acid X is an amino acid with side chain shorter than that of glutamine, and said variant has reverse transcriptase activity.--

Cancel claims 5-12.

***Allowable Subject Matter***

Claims 1-4 and 14-16 are allowed.

***Reasons for Allowance***

The following is an Examiner's statement for allowance. Although the prior art discloses a Moloney murine leukemia virus reverse transcriptase having 100% sequence identity to SEQ ID NO:2, the Examiner has found no teaching or suggestion in the prior art directed to variant of SEQ ID NO:2, wherein said variant has the amino acid sequence of SEQ ID NO:2 except having an amino acid substitution position 84. Therefore, claims 1-4 and 14-16 are allowable over the prior art.

***Conclusion***

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Pak whose telephone number is 571-272-0935. The examiner can normally be reached 6:30 A.M. to 5:00 P.M. Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Yong D Pak/  
Primary Examiner, Art Unit 1652